

CLAIMS

What is claimed is:

1. High-load drawbar eye (1) with a hitch socket (2) which is open about the rim for receiving a matching hitch ball (7), a hitch arm (3) and a hitch flange (4), characterized in that a hold-down device (5) is provided which cooperates with the hitch socket (2).
2. High-load drawbar eye (1) according to claim 1, characterized in that the hold-down device (5) is - as viewed in operating position - movably supported on the bottom side (31) of the hitch arm (3).
3. High-load drawbar eye (1) according to claim 1 or 2, characterized in that the hold-down device (5) can be operated by means of an actuating apparatus (6).
4. High-load drawbar eye (1) according to claim 3, characterized in that the actuating apparatus (6) has a toggle joint (61).
5. High-load drawbar eye (1) according to claim 3, characterized in that the actuating apparatus (6) includes an eccentric lever (63).
6. High-load drawbar eye (1) according to claim 3, 4 or 5, characterized in that the actuating apparatus (6) includes a manual lever (62).
7. High-load drawbar eye (1) according to claim 3, characterized in that the actuating apparatus (6) includes a pneumatic and/or hydraulic cylinder.
8. High-load drawbar eye (1) according to one of the claims 1 to 7, characterized in that the hold-down device (5) includes a semicircular fork (51).

9. High-load drawbar eye (1) according to claim 8, characterized in that a collar (21) matching the fork (51) is formed on the hitch socket (2).
10. High-load drawbar eye (1) according to claim 9, characterized in that the collar (21) is provided with recesses (22) and that projections (52) matching the recesses (22) are provided on the fork (51).
11. High-load drawbar eye (1) according to one of the claims 1 to 10, characterized in that the hitch socket (2) is of substantially hemispherical shape, and the hold-down device (5) is arranged in the region of the greatest diameter of the hitch socket (2).
12. High-load drawbar eye (1) according to one of the claims 1 to 11, characterized in that the portion of the hitch ball (7) that is receivable by the hitch socket (2) and the hold-down device (5) is greater than a hemisphere having the diameter of the hitch ball (7), thereby realizing a substantially flat contact of the receivable portion of the hitch ball (7).
13. High-load drawbar eye (1) according to one of the claims 1 to 12, characterized in that the center axis (25) of the hitch socket (2) defines with the longitudinal axis (35) of the hitch arm (3) an angle (α) different from 90°, wherein the angle (α) is preferably in a range between approximately 50° and approximately 80°, in particular in a range between 60° and 70°.